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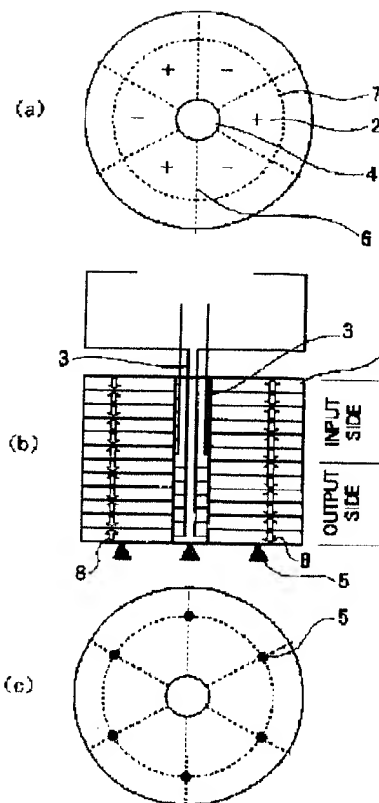
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TITLE : LAMINATED PIEZOELECTRIC
TRANSFORMER



ABSTRACT : PROBLEM TO BE SOLVED: To provide a laminated piezoelectric transformer which is excellent in performance by a method, wherein a vibration mode where the laminated piezoelectric transformer composed of a support structure and lead wires deteriorates less in mechanical vibration coupling coefficient Q_m is utilized.

SOLUTION: Piezoelectric ceramic disks 1 are polarized for alternately changing in a direction 8 of polarization in a thicknesswise direction for exciting a higher flexing vibration mode B (1, 3) (three node lines, one node circle). After polarizing electrodes have been removed by etching, silver electrode paste is applied to both the sides of each piezoelectric ceramic disk and baked. A hole 4 is bored in each piezoelectric ceramic disk at its center so as to lead out the lead wires 3 of an input/output part. The piezoelectric ceramic disks are laminated and bonded together with adhesive agent. Six intersections of the node lines 6 and a node circle 7 of a flexing vibration mode B (1, 3) are made to serve as supporting spots 5, and the laminated piezoelectric ceramic disks are bonded to a board at the supporting spots, whereby a piezoelectric transformer is supported.

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